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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|----------------|----------------------|---------------------|------------------|
| 10/552,874 | 10/25/2006 | Herbert Seeger | STUR-41 | 9183 |
| Scott R Foster | 7590 02/18/200 | EXAMINER | | |
| Pandiscio & Pa | | HOLMES, JUSTIN | | |
| 470 Totten Pond Road Waltham, MA 02451-1914 | | | ART UNIT | PAPER NUMBER |
| | | | 3655 | |
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| | | | MAIL DATE | DELIVERY MODE |
| | | | 02/18/2009 | PAPER |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | Application No. | Applicant(s) | | | | | |
|--|---|-----------------------|--|--|--|--|--|
| Office Action Comments | 10/552,874 | SEEGER ET AL. | | | | | |
| Office Action Summary | Examiner | Art Unit | | | | | |
| | JUSTIN HOLMES | 3655 | | | | | |
| The MAILING DATE of this communication app Period for Reply | ears on the cover sheet with the c | orrespondence address | | | | | |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). | | | | | | | |
| Status | | | | | | | |
| 1) Responsive to communication(s) filed on 25 Oc | ctober 2006. | | | | | | |
| | action is non-final. | | | | | | |
| · <u> </u> | / - | | | | | | |
| , | closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. | | | | | | |
| Disposition of Claims | | | | | | | |
| <u> </u> | | | | | | | |
| | Claim(s) <u>1-12</u> is/are pending in the application. | | | | | | |
| | 4a) Of the above claim(s) is/are withdrawn from consideration. | | | | | | |
| 5) Claim(s) is/are allowed. | | | | | | | |
| | 6) Claim(s) <u>1-12</u> is/are rejected. | | | | | | |
| 7) Claim(s) is/are objected to. | | | | | | | |
| 8) Claim(s) are subject to restriction and/or | 8) Claim(s) are subject to restriction and/or election requirement. | | | | | | |
| Application Papers | | | | | | | |
| 9)☐ The specification is objected to by the Examiner. | | | | | | | |
| 10)⊠ The drawing(s) filed on <u>12 October 2005</u> is/are: a)□ accepted or b)⊠ objected to by the Examiner. | | | | | | | |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). | | | | | | | |
| Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). | | | | | | | |
| 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. | | | | | | | |
| Priority under 35 U.S.C. § 119 | | | | | | | |
| 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). | | | | | | | |
| * See the attached detailed Office action for a list of the Attachment(s) 1) \(\sum \) Notice of References Cited (PTO-892) 2) \(\sum \) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) \(\sum \) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date \(\frac{10/12/05}{2} \). | of the certified copies not receive 4) | (PTO-413) ite | | | | | |

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DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

- 2. The information disclosure statement (IDS) submitted on October 12, 2005 is being considered by the examiner.
- 3. Claims 1-12 are currently pending.

Drawings

- 4. The drawings are objected to because the current drawings have extraneous words, serial numbers and foreign languages along the margins of the drawing in Figs.
- 1-3. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New

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Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 103

- 5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 6. Claims 1-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,224,906 to Sturm in view of U.S. Patent No. 4,234,831 to Kemmer et al.

Regarding claims 1-4, 6, 8-10 and 12, the Sturm patent teaches a fluid-operable rotary drive clutch having drive plates 24, at least one of which is connected rotationally fixedly to an input assembly 22 and at least one other is connected rotationally fixedly to an output assembly 26, operating fluid being conveyed from a pressure chamber of a piston/cylinder unit 38 through a connecting line 40 to an additional pressure chamber 44, which is sealed by an annular piston 46 of a clutch actuating ring (the front portion of piston 46 adjacent plate 28) that is axially translatable when pressure is applied to it, a front face of the piston, facing toward the additional pressure chamber 44, being acted on by the pressure of the operating fluid to engage or disengage said rotary drive clutch 20, depending on the function of said rotary drive clutch 20, and the piston/cylinder unit 38 being connected to the connecting line 40 rotationally fixedly, pressure-tightly, and

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co-rotatably with a clutch component (the housing of the transmission 19) from which the connecting line 40 opens into the additional pressure chamber 44, wherein the piston/cylinder unit 38 is acted on by an external force generator 30. The piston/cylinder unit 38, connecting line 40 and additional pressure chamber 44 are all rotationally fixedly and co-rotatably connected to each other through the housing in that they are all fixed to move with one another. See Fig. 1.

However, the Sturm patent lacks a teaching of a force generator having a rotor and stator.

The Kemmer et al. patent teaches an external force generator, namely, a linear motor having a rotor 3 and a stator s1, s2, said rotor 3 being traversable in an axial direction and being journaled so that it is able to move rotationally with respect to said stator s1, s2. See Fig. 1 and column 2, lines 34-56.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the Sturm patent to include the external force generator as taught in the Kemmer et al. patent in order to provide a motor that allows for preset positions ahead of time. See column 3 lines 35-40 of the Kemmer et al. patent.

Regarding claim 5, the rotor 3 of said linear motor (17) is electrically driven. See column 3, lines 40-45 of the Kemmer et al. patent.

Regarding claim 7, the linear motor is operated in a closed control circuit with preset operating parameters. See column 3, lines 35-40 of the Kemmer et al. patent.

Regarding claim 11, the piston/cylinder unit 38 is mounted rotatably in a stationary and self-contained housing and is connected communicatingly, via a co-

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rotating conduit system 40, to a selected one of a clutch chamber 20. See Fig. 1 of the Sturm patent.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. U. S. Patent No. 4,344,022 to Von der Heide; U. S. Patent No. 4,862,769 to Koga et al.; U. S. Patent No. 4,947,974 to Smemo et al.; U. S. Patent No. 5,325,949 to Dommett et al.; U. S. Patent No. 5,440,183 to Denne; and U. S. Patent No. 7,097,019 to Ronk et al. all teach various clutches and actuator assemblies.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JUSTIN HOLMES whose telephone number is (571)272-3448. The examiner can normally be reached on 8:00am to 4:30pm M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Marmor can be reached on 571-272-7095. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/JUSTIN HOLMES/ Examiner, Art Unit 3655

/CHARLES A. MARMOR/ Supervisory Patent Examiner, Art Unit 3655